Customer Case Study

Österreichische Wertpapierdaten Service GmbH (ÖWS): tcVISION replicates DB2 z/OS to Intel-based Linux System

**BUSINESS BACKGROUND**
Because of the very dynamic and agile nature of the financial markets, new solutions are constantly being developed. ÖWS has been able to provide enormous savings potential for its customers owing to the central procurement, maintenance and distribution of data and its ability to roll out new solutions quickly and successfully. ÖWS has the ‘know-how’ to perform continuous improvements, enhancements and optimization that an individual financial organization would be challenged to handle in this ever changing market.

ÖWS offers a complete solution with full coverage for the market demands: up-to-date market data, and the know-how to react to current and future demands.

**SYSTEM PROFILE**
One of the core applications is an in-house ÖWS originated through the merging of data services of several well-known Austrian finance institutions. Specialization and efficiency characterize the work and the day-to-day operations of the company. The heart of the ÖWS IT infrastructure is an IBM Mainframe with the z/OS operating system. Services and solutions project leader at ÖWS, Werner Daschl, describes the service provided by ÖWS, “The majority of the Austrian banks use a standard product for the processing of business related to security papers. ÖWS acts as a data provider for this system concerning master data and transaction data. Every customer installation uses the same DB2 database model that acts as a target for the data replication performed by the ÖWS system.”

**BUSINESS ISSUE**
“In the past, the data volume maintained by the system was completely transferred to the customer,” according to Mr. Daschl. “This created unnecessary costs for our customers, especially for non-traded stock exchange values of security. During the course of 2008, a project was started with the objective to considerably reduce the amount of data at the customer site and to reduce the data transfer volume. Part of the project was a new subscription service for the customers. This service enabled the customer to selectively subscribe to just the data they needed. The result and benefits of this service was the renewal of the data propagation software to implement such a selective provision of data to our customers.”

**TECHNOLOGY SOLUTION**
The technical focus of the project clearly was the evaluation of data propagation software that allowed a flexible data distribution. Tests had been performed with other vendor solutions. Mr. Daschl added, “In the course of the evaluation we came across tcVISION from B.O.S. Software. The professional and competent product presentation by the vendor, the scope and the functionality of the product, and the flexibility of the solution experienced during the testing period were the main factors that led us to select tcVISION.”

The implementation of the new subscription service is now fully completed and has been in production for 18 months. Mr. Daschl recalled, “Technically, the distribution of the data, based upon the customer subscriptions, was solved using a bit string as an integer attribute for the relevant tables. For every replicated record, a comparison is performed using a logical bit compare with different comparison values to check whether the record should be distributed to the customer. If the bit comparison is not successful, the record is rejected. In addition to the bit string logic, a comparison based upon a SQL lookup and character string comparisons are performed.”

Based upon the experience during the production use, all expectations for the product have been fulfilled. Mr. Daschl added, “During the testing period, the required functionality that was reported to B.O.S. was promptly implemented into tcVISION. All in all, I think the product itself has also evolved because of the requirements and challenges of our project. B.O.S. very quickly resolved functionality for any new challenges encountered. These solutions were implemented with a high priority placed on customer requirements. This superior support by B.O.S. was an important factor as we made the decision to acquire tcVISION. As a customer of B.O.S., I feel strongly that we are ‘in good hands.’ B.O.S. is a reliable partner, especially during situations that require immediate attention and action.”
Mr. Daschel further summarized the experience, “The ÖWS is the data turntable of security papers for practically all bank locations in Austria. It is of utmost importance to perform this task with qualitative, quantitative and up-to-date information in real time. With the implementation of tcVISION, optimization potential of the project was realized and the quality of these services has been greatly improved.

“Large data volumes must be transferred to the ÖWS customers on an ongoing basis. The majority of the data is received by a fully automated system at ÖWS, processed, distributed and implemented into the customer systems. These large data volumes (approximately 2 million stock exchange values per day) can only be processed if the technology components deployed function faultlessly, efficiently and with excellent performance.

“The BOS team has gone above and beyond in providing exceptional support and services to fulfill ÖWS’s requirement in achieving the state-of-the-art securities quality service for the Austrian financial industry. This cooperation over the past few years has solidified an outstanding partnership between ÖWS and BOS and thus has formed the foundation for a continued successful cooperation well into the future.”

Application Example Österreichische Wertpapierdaten Service GmbH

ÖWS provides all financial data required by their customers, obtaining the data from leading financial data providers for real-time quotes, such as WM Frankfurt, SIX Telekurs, Vienna Stock Exchange and various publications.

To serve each individual customer based upon their specific requirements, a subscription system has been developed that only transfers the stock exchange values to the customer that have been requested. The distribution of the subscription data is performed by tcVISION.

The subscribed data are captured by tcVISION in real time from the active log of a shared DB2-z/OS system using the Instrumentation Facility Interface of DB2. The changed data are transferred to an Intel-based Linux system via TCP/IP where the distribution of the data records to the customers is performed based upon record attributes.

Distribution of the data according to customer subscriptions is determined using a bit string as an integer attribute for the relevant tables. For every replicated record, a comparison is performed using a logical bit compare with different comparison values to check whether the record should be distributed to the customer.

In addition to the bit string logic, a comparison based upon a SQL lookup and character string comparisons are performed.

All processing definitions are stored in a central tcVISION Repository.

Example Bit comparison:

Logical AND-comparison between attribute ABONNENTEN_CODE and a compare value. The customer output record contains value 0 for anonymization of the remaining subscribers.

Transfer of licensed data via a Lookup-SQL:

The data records of the table are only transferred when the Join across multiple tables produces a result.